

CLAIMS

1. A gun tube support assembly comprising a plurality of support sections arranged annularly around a gun tube, each including:

5 - a bush housing;

 - a cradle bush for the bush housing for receiving and supporting the gun tube; and

 - a damping means sandwiched between the bush housing and cradle bush, for absorbing and damping kinetic energy emanating
10 from the gun tube during firing thereof.

2. A gun tube support assembly according to claim 1 wherein the damping means is a resilient body selected from the group consisting of a rubber pad, a spring, and a pneumatic or hydraulic cushion.

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3. A gun tube support assembly according to claim 2 wherein the damping means comprises a pad of a relatively high-temperature silicon rubber.

20 4. A gun tube support assembly according to claim 3 wherein the rubber pad includes a plurality of protrusions extending from a face of the pad for accommodating compression of the pad.

5. A gun tube support assembly according to any one of claims 2 to 4 wherein each bush housing comprises a curved bush housing plate having an inner surface for abutting the resilient body.

5 6. A gun tube support assembly according to claim 5 wherein end flanges for connecting the bush housing to a cradle of a gun are disposed towards opposite ends of the bush housing plate.

10 7. A gun tube support assembly according to claim 6 wherein removable side flanges for retaining the resilient body are further connectable to the sides of the bush housing plate.

15 8. A gun tube support assembly according to claim 7 wherein each cradle bush comprises a cradle bush plate curved complementary to the bush housing plate and having an inner surface for abutting the gun tube and an outer surface for abutting the resilient body.

20 9. A gun tube support assembly according to claim 8 wherein the end flanges extend in the direction of the bush housing from the respective opposite ends of the cradle bush plate.

10. A gun tube support assembly according to claim 9 wherein the protrusions extending from the rubber pad face towards the gun tube to abut the outer surface of the cradle bush plate.

5 11. A gun tube support assembly according to any one of the preceding claims which includes from two to six support sections arranged annularly around the gun tube and received in an opening in the cradle.

10 12. A gun tube support assembly according to any one of the preceding claims wherein the cradle bush is biased in the direction of the gun tube to keep the cradle bush in contact with the gun tube and to allow for thermal expansion of the gun tube.

15 13. A cradle for carrying a gun tube including a gun tube support assembly according to claims 1 to 12.

14. A gun provided with a gun tube support assembly according to claims 1 to 12.

20 15. A gun tube support assembly substantially as herein described and as illustrated in the accompanying drawings.

16. A cradle for carrying a gun tube substantially as herein described and as illustrated in the accompanying drawings.

17. A gun provided with a gun tube support assembly substantially as herein described and with reference to the accompanying drawings.